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1, NL-5621 BA Eindhoven (NL). **BOERNERT, Peter** [DE/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

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(74) Common Representative: **KONINKLIJKE PHILIPS ELECTRONICS, N.V.**; c/o **LUNDIN, Thomas, M.** 595 Miner Road, Cleveland, Ohio 44143 (US).

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(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS, N.V.** [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(71) Applicant (for AE only): **U.S. PHILIPS CORPORATION** [US/US]; 1251 Avenue of the Americas, New York, New York 10020 (US).

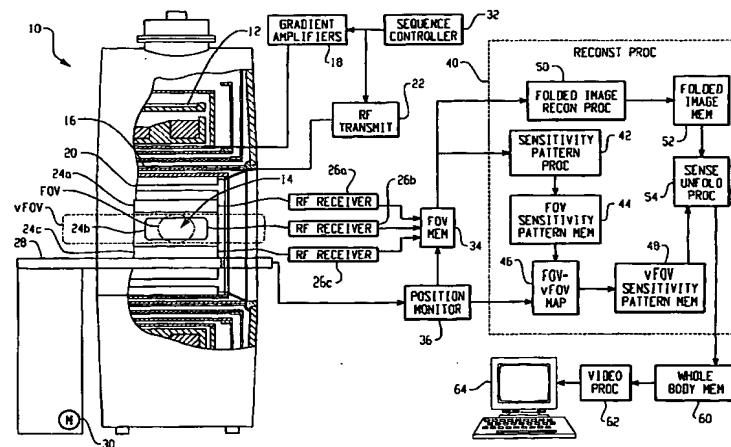
(72) Inventors; and

(75) Inventors/Applicants (for US only): **KEUPP, Jochen** [DE/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL). **ALDEFELD, Bernd** [DE/NL]; Groenewoudseweg

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(54) Title: FAST CONTINUOUS MOVING BED MAGNETIC RESONANCE IMAGING WITH MULTIPLE STATIONARY RECEIVE COILS FOR SENSE RECONSTRUCTION



(57) Abstract: A plurality of global receive coils (24a, 24b, 24c) are stationarily positioned around a fixed field of view (FOV) of a magnetic resonance diagnostic imaging device (10). Each global receive coil receives undersampled phase and frequency encoded data from the stationary field of view. A subject is imaged as it moves continuously through the fixed field of view such that data is collected over a virtual field of view (vFOV) of the subject which is longer than the field of view in a longitudinal direction of subject motion. Centrally encoded k-space data, acquired from each of the global receive coils, is used to generate coil sensitivity patterns (42) which are mapped (44) from the stationary field of view to the virtual field of view. A SENSE reconstruction processor (54) performs a SENSE reconstruction on the virtual field of view data in which reconstructed data is combined and unfolded in accordance with the virtual field of view sensitivity patterns (48) to generate a virtual field of view image representation (60).

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